



#9

SEQUENCE LISTING

<110> THE Salk Institute For Biological Studies
NOEL, Joseph
VERDECIA, Mark

<120> CRYSTAL STRUCTURE OF WW DOMAINS AND METHODS AND USE THEREOF

<130> SALK2410

<140> US 09/733,773

<141> 2000-12-08

<160> 32

<170> PatentIn version 3.0

<210> 1

<211> 163

<212> PRT

<213> Homo sapiens

<220>

<221> PEPTIDE

<222> (1)..(163)

<223> Pin1

<400> 1

Met Ala Asp Glu Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser
1 5 10 15

Arg Ser Ser Gly Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser
20 25 30

Gln Trp Glu Arg Pro Ser Gly Asn Ser Ser Ser Gly Gly Lys Asn Gly
35 40 45

Gln Gly Glu Pro Ala Arg Val Arg Cys Ser His Leu Leu Val Lys His
50 55 60

Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg Gln Glu Lys Ile Thr Arg
65 70 75 80

Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn Gly Tyr Ile Gln Lys Ile
85 90 95

Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu Ala Ser Gln Phe Ser Asp
100 105 110

Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu Gly Ala Phe Ser Arg Gly
115 120 125

Gln Met Gln Lys Pro Phe Glu Asp Ala Ser Phe Ala Leu Arg Thr Gly
 130 135 140

Glu Met Ser Gly Pro Val Phe Thr Asp Ser Gly Ile His Ile Ile Leu
 145 150 155 160

Arg Thr Glu

<210> 2
 <211> 38
 <212> PRT
 <213> Homo sapiens

<220>
 <221> DOMAIN
 <222> (1)..(38)
 <223> Ww Domain of Pin1

<400> 2

Met Ala Asp Glu Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser
 1 5 10 15

Arg Ser Ser Gly Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser
 20 25 30

Gln Trp Glu Arg Pro Ser
 35

<210> 3
 <211> 7
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (2)..(2)
 <223> PHOSPHORYLATION

<220>
 <221> MOD_RES
 <222> (5)..(5)
 <223> PHOSPHORYLATION

<400> 3

Tyr Ser Pro Thr Ser Pro Ser
 1 5

<210> 4
<211> 9
<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>

<223> YAB65-PPXY peptide complex

<220>

<221> VARIANT

<222> (6)..(6)

<223> Xaa is any amino acid (Pro in Figure 4a & 4b)

<400> 4

Gly Thr Pro Pro Pro Xaa Tyr Thr Val
1 5

<210> 5
<211> 8
<212> PRT
<213> ARTIFICIAL

<220>

<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>

<223> Pintide Pin1-Peptide Complex

<400> 5

Trp Phe Tyr Ser Pro Phe Leu Glu
1 5

<210> 6
<211> 8
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> Pintide Pin1-Peptide Complex

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 6

Trp Phe Tyr Ser Pro Phe Leu Glu
1 5

<210> 7
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 7

Val Pro Arg Thr Pro Val
1 5

<210> 8
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 8

Tyr Leu Gly Ser Pro Ile
1 5

<210> 9
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 9

Leu Tyr Arg Ser Pro Ser
1 5

<210> 10
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 10

Gly Ser Ser Ser Pro Val
1 5

<210> 11
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 11

Pro Pro Ala Thr Pro Pro
1 5

<210> 12
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 12

Pro Pro Gly Ser Pro Pro
1 5

<210> 13
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (4)..(4)
<223> PHOSPHORYLATION

<400> 13

Ser Thr Ser Thr Pro Arg
1 5

<210> 14
<211> 7
<212> PRT
<213> Homo sapiens

<400> 14

Tyr Ser Pro Thr Ser Pro Ser
1 5

<210> 15
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

<400> 15

Tyr Ser Pro Thr Ser Pro Ser
1 5

<210> 16
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (5)..(5)
<223> PHOSPHORYLATION

<400> 16

Tyr Ser Pro Thr Ser Pro Ser
1 5

<210> 17
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (2)..(2)
<223> PHOSPHORYLATION

<220>
<221> MOD_RES
<222> (5)..(5)
<223> PHOSPHORYLATION

<400> 17

Tyr Ser Pro Thr Ser Pro Ser

1

5

<210> 18
 <211> 34
 <212> PRT
 <213> ARTIFICIAL

<220>

<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>

<223> hPin1 peptide complex

<400> 18

Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly Arg
 1 5 10 15

Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg Pro
 20 25 30

Ser Gly

<210> 19
 <211> 34
 <212> PRT
 <213> ARTIFICIAL

<220>

<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>

<223> Sc Ess1 peptide complex

<400> 19

Gly Leu Pro Thr Pro Trp Thr Val Arg Tyr Ser Lys Ser Lys Lys Arg
 1 5 10 15

Glu Tyr Phe Phe Asn Pro Glu Thr Lys His Ser Gln Trp Glu Glu Pro
 20 25 30

Glu Gly

<210> 20
<211> 34
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> d Dodo peptide complex

<400> 20

Gln Leu Pro Asp Gly Trp Glu Lys Arg Thr Ser Arg Ser Thr Gly Met
1 5 10 15

Ser Tyr Tyr Leu Asn Met Tyr Thr Lys Glu Ser Gln Trp Asp Gln Pro
20 25 30

Thr Glu

<210> 21
<211> 34
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> m Pin1 peptide complex

<400> 21

Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly Arg
1 5 10 15

Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg Pro
20 25 30

Ser Gly

<210> 22
<211> 34
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> Kn Pin1 peptide complex

<400> 22

Gly Leu Pro Ala Gly Trp Glu Val Arg His Ser Asn Ser Lys Asn Leu
1 5 10 15

Pro Tyr Tyr Phe Asn Pro Ala Thr Arg Glu Ser Arg Trp Glu Pro Pro
20 25 30

Ala Asp

<210> 23
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> h YAP65 peptide complex

<400> 23

Pro Leu Pro Ala Gly Trp Glu Met Ala Lys Thr Ser Ser Gly Gln Arg
1 5 10 15

Tyr Phe Leu Asn His Ile Asp Gln Thr Thr Thr Trp Gln Asp Pro Arg
20 25 30

Lys

<210> 24
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> h Dryst peptide complex

<400> 24

Ser Val Gln Gly Pro Trp Glu Arg Ala Ile Ser Pro Asn Lys Val Pro
1 5 10 15

Tyr Tyr Ile Asn His Glu Thr Gln Thr Thr Cys Trp Asp His Pro Lys
20 25 30

Met

<210> 25
<211> 32
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> Sc Rsp5-WW1 peptide complex

<400> 25

Leu Pro Pro Gly Trp Glu Arg Arg Thr Asp Asn Phe Gly Arg Thr Tyr
1 5 10 15

Tyr Val Asp His Asn Thr Arg Thr Thr Thr Trp Lys Arg Pro Thr Leu
20 25 30

<210> 26
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> Sc Rsp5-WW2 peptide complex

<400> 26

Glu Leu Pro Ser Gly Trp Glu Gln Arg Phe Thr Pro Glu Gly Arg Ala
1 5 10 15

Tyr Phe Val Asp His Asn Thr Arg Thr Thr Thr Trp Val Asp Pro Arg
20 25 30

Arg

<210> 27
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> Sc Rsp5-WW3 peptide complex

<400> 27

Pro Leu Pro Ser Gly Trp Glu Met Arg Leu Thr Asn Thr Ala Arg Val
1 5 10 15

Tyr Phe Val Asp His Asn Thr Lys Thr Thr Thr Trp Asp Asp Pro Arg
20 25 30

Leu

<210> 28
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> m NEDD4-WW1 peptide complex

<400> 28

Pro Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Val Leu Gly Arg Thr
1 5 10 15

Tyr Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro Ser
20 25 30

Pro

<210> 29
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> m NEDD4-WW2 peptide complex

<400> 29

Gly Leu Pro Pro Gly Trp Glu Glu Lys Gln Asp Asp Arg Gly Arg Ser
1 5 10 15

Tyr Tyr Val Asp His Asn Ser Lys Thr Thr Thr Trp Ser Lys Pro Thr
20 25 30

Met

<210> 30
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> m NEDD4-WW3 peptide complex

<400> 30

Pro Leu Pro Pro Gly Trp Glu Glu Arg Thr His Thr Asp Gly Arg Val
1 5 10 15

Phe Phe Ile Asn His Asn Ile Lys Lys Thr Gln Trp Glu Asp Pro Arg
20 25 30

Leu

<210> 31
<211> 33
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> m NEDD4-WW4 peptide complex

<400> 31

Pro Leu Pro Glu Gly Trp Glu Ile Arg Tyr Thr Arg Glu Gly Val Arg
1 5 10 15

Tyr Phe Val Asp His Asn Thr Arg Thr Thr Thr Phe Lys Asp Pro Arg
20 25 30

Asn

<210> 32
<211> 32
<212> PRT
<213> ARTIFICIAL

<220>
<223> Description of Artificial Sequence: Modification of Homo sapiens Pin1 WW domain

<220>
<223> h FE65 peptide complex

<400> 32

Asp Leu Pro Ala Gly Trp Met Arg Val Gln Asp Thr Ser Gly Thr Tyr
1 5 10 15

Tyr Trp His Ile Pro Thr Gly Thr Thr Gln Trp Glu Pro Pro Gly Arg
20 25 30